Held
CATALOGUE
SEP 6 1938

THE Eye and Ear, Nose and Throat Clinic

EDITED BY

FLAVEL B. TIFFANY, M.D.
1233 Grand Avenue,

JAMES E. LOGAN, M.D.
1210 Wyandotte Street,

Department of Neurology by JOHN PUNTON, M.D.
308 Ridge Building.

KANSAS CITY, MO.

ISSUED QUARTERLY. PRICE, $1.00 PER ANNUM.

VOL. I. JULY, 1895. No. 1.

Contents.

	Page.		Page.
Helmholtz	1	Treatment of Acute Otitis Media. By Geo. E. Bellows, A.M., M.D.	20
Rembrandt. By Olive E. F. Tiffany	5	Eye and Ear Clinic in the University Medical College. By C. D. Ussher, Senior Student	22
Rhinoliths. By Dr. James E. Logan	8	Editorial	27
Congenital Ectopia Lentis. By Dr. Flavel B. Tiffany	10	American Medical Association	28

All communications must be addressed to the Secretary,
DR. H. D. JEROWITZ,
1235 Grand Avenue, Kansas City, Mo.

Published by HUDSON-KIMBERLY PUBLISHING CO., 1014-1016 Wyandotte St., Kansas City, Mo.

Entered at the postoffice, Kansas City, Mo., as second-class matter.

BOSTON
SEP 6 1938
MEDICAL LIBRARY

DIRECTORY OF SURGICAL INSTRUMENT DEALERS AND OPTICIANS.

J. N. SCOTT,

SURGICAL INSTRUMENTS

Hospital and
Physicians' Supplies,

412-13-14 New Ridge Bldg.,

Tel. 567. KANSAS CITY, MO.

DEFORMITY APPARATUS.

R. I. PEARSON & CO.

RIALTO BUILDING,

906 Grand Avenue,

KANSAS CITY, MO.

Physicians'
Supply Co.

FULL LINE OF

Surgical Instruments

916 WALNUT ST.,

KANSAS CITY, MO.

TO THE DOCTOR:

Write to us for prices on anything in the Drug and Surgical Instrument line.

Send to us for any rare drug that cannot be obtained of your local druggist.

W. U. ZAHNER,

Drugs, Wholesale and Retail,

Cor. 12th and Grand Avenue,

KANSAS CITY, MO.

C. L. MERRY,

WHOLESALE AND MANUFACTURING OPTICIAN

KANSAS CITY, MO.

Send for Catalogue.

D. C. PRUDDEN,

OPTICIAN

1017 Walnut Street,

KANSAS CITY, MO.

G. B. LICHTENBERG,

OPTICIAN

1210 MAIN ST.,

Kansas City, Mo.

Julius Baer,

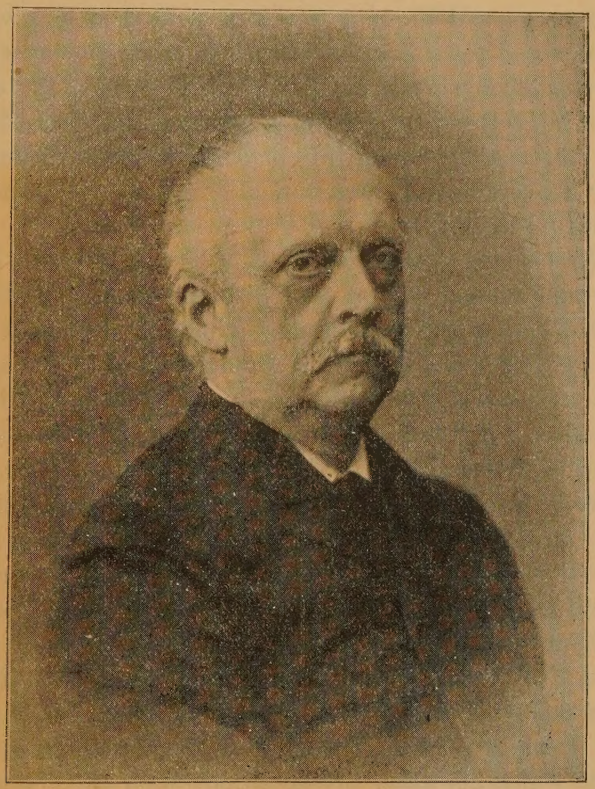
OPTICIAN

1030 Main Street.

KANSAS CITY, MISSOURI.

EYE, EAR, NOSE and THROAT CLINIC.

Vol. I. JULY, 1895. No. 1.



H. v. Helmholtz

Hermann Louis Ferdinand von Helmholtz, of Berlin, was born in Potsdam, August 31, 1821; studied in the University of Berlin in 1838 as pupil in medicine and surgery; was graduated from the Frederick Wilhelms Institute in 1842, with the Inaugural thesis, entitled "De fabrica sys-

tematis nervosi evertebratorum"; under surgeon in the Charité; 1843, army physician in Potsdam; returned in 1848 as teacher of anatomy at the Academy of Arts and assistant at the Anatomical Museum at Berlin; was called in 1849 to the professorship of physiology and universal pathology at Königsberg, and in 1855 was transferred as professor of anatomy and physiology at Bonn; from thence he went as professor of physiology to Heidelberg in 1858. In 1871, at Berlin, he accepted, together with the direction of the Physical Institute, a professorship of physics, with the character of Privy Government Counsellor, and in 1883 was ennobled, which title he now bears.

He belongs to the class of the Johannes Müller's school; he became famous as a physiologist and established his calling with the work, "Ueber die Erhaltung der Kraft" (Berlin, 1847), in which he for the first time seeks to show that all the transactions of Nature obey the fundamental laws of mechanics. In the following year Helmholtz's activity was turned to the physiology of the mind. But the invaluable service he gave to human pathology and therapeutics through the invention of the ophthalmoscope, which entirely revolutionized ophthalmology, he made known in another work. "Beschreibung eines Augen-Spiegels zur Untersuchung der Netzhaut im lebenden Auge" (Berlin, 1851).

Among other works claiming our highest admiration, and in their special spheres pointing out new phases of science, are "Handbuch der physiologischen Optik" (Leipzig, 1856–66), in which his whole investigations upon the e esight are laid down, and this book (now being revised by Dr. Arthur König, of Berlin), "Die Lehre von den Tonempfindungen" (Braunschweig, 1862; second edition 1865), which contains his acoustic investigations, displayed in collation. Besides, he has a large class of other works; for instance, measurements of the rapidity of transmission of nerve irritation, investigations upon articles on optics, acoustics, electricity teachings;

manifold articles in journals; others in Müller's *Archiv* (1845–48, 50, 52, etc.), Poggendorff's *Annalen* (of 1852 *et seq.*), Crelle's *Journal of Mathematics*, and Von Graefe's *Archiv* (1855); also such small works as "Ueber die Wechselwirkung der Naturkräfte," etc. (Königsberg, 1854), "Ueber das Sehen des Menschen" (Leipzig, 1855), "Populäre Vorträge" (second part, Braunschweig, 1865–67), are published.

His scientific treatises are together in two volumes (Leipzig, 1881–83); his reports and discourses are also in two volumes (Braunschweig, 1884). The above are a few of the many valuable works of this scientist.

The subject of this sketch, on the 8th of September, 1894, died at his home (Charlottenberg, near Berlin), in his seventy-third year.

Dr. Knapp, who was a personal friend of Prof. Helmholtz, says in his obituary (*Archives of Ophthalmology*, October, 1894):

"The allotment of his time for waking and sleeping, work and recreation, home-life and travel, was such as to make his labor in the highest degree efficient and his life not only most useful, but also most enjoyable and healthy. He hated to be annoyed by idlers and scientific pretenders. In the lecture-room he always was precise and unswervingly adherent to the subject, never being 'out of order,' despising jokes and stories to amuse his audience. He kept the attention of his listeners by the wealth of interesting facts and the clearness, precision, and elegance of his delivery. He was constantly in contact with his pupils, aiding and assisting them; thus much of his scientific work was given to the world under the names of his pupils. He frequently made excursions with his laboratory students into the vicinity of Heidelberg and then dined with them in the evening.

"Taking him all in all, he was as near a perfect man as Nature has ever produced, the gift of the highest intellect combined with nobility of character and purity of life."

THE LESSON IN ANATOMY—REMBRANDT.

REMBRANDT.

The original of the picture before us, that prompts this article, is of world-wide fame. It is the work of the early manhood of Holland's greatest painter, and however inartistic as an art subject, it is full of interest, both for its intrinsic merit and its prophecy of the wonderful future of the artist, Rembrandt. It is one of a great many representations at this time of kindred subjects by brother artists; paintings thought much of at the time, but now either lost or uncared for. It belongs to the early part of the seventeenth century, when Holland, young and vigorous in her new freedom (freed really, although not yet formally) from the hated Spanish yoke, was deeply interested in the "proper study of mankind, man," particularly man's physical or anatomical structure.

Scarcely a century had rolled its round since Philip II. had proclaimed the legality of dissecting the human body, and Holland was rife with lecture courses on the subject. The public were admitted to these lectures; the halls in which they were held were filled with curious objects, forming small museums. The walls were hung with portraits of surgeons, the most distinguished of their times; and artists turned from the master alone to the master at work surrounded by his pupils, or by the members of the corporation. In the Guild of Amsterdam three such pictures had preceded Rembrandt's. The most remarkable, perhaps, was one painted by Thomas de Keyser, representing Dr. S. Egberts explaining to five auditors arranged around him the structure of the skeleton of a babe. Rembrandt, not yet twenty-five years of age, far surpassed in his picture all his predecessors. The painting, "The Lesson in Anatomy" (now in the museum at La Hague), concentrates all the light upon the body being studied and the professor (Dr. Tulp) teaching. Note the calm, dignified, and authoritative

intelligence in the face of the teacher, and the intent, varying expressions upon the faces of the taught. The painting done, it brought fame at once. It really marks an era in the career of the artist. Such was its success that a great number of the most illustrious people of Amsterdam sat, during this and the next year, to the artist for their portraits. Rembrandt's superiority as a portrait-painter continued to increase through life. His flesh tints are wonderfully fresh and true, and the sitter's individuality is distinctly kept. The real person, in his most subtle distinctiveness, appears in the portrait.

Shortly after this painting Rembrandt removed his residence to the Jews' quarter of Amsterdam, the better to study their national phases of character, and to be able to obtain in their shops possession of stuffs, arms, curiosities of all sorts, which he was beginning to collect. Among these Jews he found the prototypes of his prophets, priests, and patriarchs of the Bible, which he dearly loved to study and to paint. He often took himself for model. Before a mirror, dressed in character, having induced the emotion whose expression he wished to depict in the face, he painted himself, time, time, and again. Indeed, we might say he was his own best studied and best loved model; and through these paintings, some in Berlin, some in Dresden, in La Hague, at Florence in the Pitti Palace, in England in Lord Leconfield's gallery and elsewhere, we can trace his masterly progress, step by step, to the acme of his fame.

About this time (1633) appeared that piquant picture, now in the Dresden gallery, of the young Saskia van Ulenburg, whose life flowed so sweetly into Rembrandt's. Their marriage, a year later, was one of those perfect unions that leave nothing to be desired. Each was all and everything to the other. Rembrandt had now another all-absorbing model, and out of many a beautiful picture Saskia's loved features shine.

Rembrandt was not happy with mythological subjects. Intensely alive with the Holland realistic spirit of the seventeenth century, the beautiful myths of ancient Greece lent themselves not readily to his spirit's conception; witness the disappointing paintings, the "Rape of Proserpine" in the Berlin gallery, the "Rape of Ganymede" in Dresden, and the etching "Diana in the Bath." This lack Rembrandt shared in common with all his compatriot artists; nor was he happier with the allegorical. The every-day life about him was rich in inspiration to him, and through his brush is wonderfully vivid to us all.

In landscape his imagination mingled the views of her lofty flights with the real one Nature put before him.

Rembrandt's power over light and shade was so great that he has been called the Father of Chiaroscuro, regardless of the fact that in Italy, two hundred years before him, the matchless Correggio had caressed it in its every phase and compelled from it all its subtleties to embody his soul's conceptions upon the canvas.

Rembrandt's masterly power with light and shade and color is fully shown in that other celebrated painting at Amsterdam of the "Syndics of the Cloth Hall" (1661). Emile Michel says of this painting: "It is Power mistress of herself, and which, without hesitation as without feebleness, attains the end she seeks. To unite thus and in a union so close, so many rare qualities, one must be such an artist as Rembrandt then was. He had never before attained that excellence, nor was he ever again to find throughout his life that privileged moment when all the gifts of Nature allied with all the experiences of an existence impassioned for art should bring forth (or culminate) such magnificent expression of his genius. With that fire which illumines it and that poetry which fills it, the work is absolutely correct and in all points perfect, and while the 'Night Watch' does not cease to provoke restrictions and disputes from the critic, the latter

(the critic) cannot in face of the 'Syndics' feel other sentiment than that of entire admiration. Simple or highly cultured, designers or colorists, realistic painter or lover of the ideal, all agree that here is a masterpiece of painting."

Rembrandt's art was all-sufficing, all-absorbing, and well for him that the delight of working was enough; for, leading the inconsequent life, so far as business is concerned, so often led by great geniuses, this world's goods were too prone to take flight, leaving him little that he could call his own, save the inexhaustible wealth of his genius. He died, deeply involved in debt, in October, 1669. In the sixty-third year of his age, life went out, leaving no other visible trace of the loss to the community save the simple mention in the register of Westerkerk of his interment there on October 8, 1669; leaving to posterity the charge of avenging the unmerited oblivion into which the great man had fallen—and nobly has time avenged him. "His glory shines to day in all its brightness," and the universal accord with which he is hailed the Shakespeare of painting "is the most magnificent homage which could be rendered to this genius, so original, so sincere."

OLIVE E. F. TIFFANY.

RHINOLITHS.

BY DR. JAMES E. LOGAN.

Professor of Diseases of the Nose, Throat, and Chest, University Medical College, Kansas City, Missouri.

As far back as 1502 we find recorded a case of rhinolith by Mathias de Gardi. Again, Bartolini records two cases, one in which a cherry seed formed the nucleus and the other seemed of spontaneous origin. Demarguay in 1845 gave us a detailed account of all the cases previously recorded and also entered into elaborate discussion as to the causation of these then rather infrequent formations. Since that time many have observed and removed them.

The cause of this trouble in a vast majority of cases can no doubt be traced to the presence of some foreign body as a nucleus, but there are many cases where no cause can be ascribed other than degenerative changes in the nasal secretions. Of this class of cases I have one to record.

Mrs. S——, aged 54—married, 32 years—no children—applied to me for treatment May 23, 1894; general health had always been good—no history of any specific trouble—had had some trouble in breathing through right nostril for a number of years—had not breathed at all through it for some five or six years—discharge very offensive. Examination May 23, '94, revealed the presence of nasal polyps completely blocking up the anterior chamber of that nostril. Posteriorly the rhinoscope displayed complete occlusion, made so by what appeared to be a large foreign body. Without attempting to complete the diagnosis, I removed from the vestibule five large polyps. Immediately the presence of a huge rhinolith was discovered. It extended from the superior meatus to the floor of the nostril, the base very broad, having completely destroyed the inferior turbinate by its pressure. Its length was about two inches. It was held in place by many adhesions to the septum and also to the outer wall, making the mass immovable.

My desire was to remove the body without crushing it, but the patient was unwilling to submit to an anæsthetic. Was then compelled to crush the projecting portion to such a size as would allow me to introduce a wire loop around the upper half. After removing this, I was enabled to grasp the lower half with a strong pair of forceps, taking it away with no trouble.

The parts remaining after crushing (at least a fourth was so removed) weighed one hundred and eighty-four grains. Further examination of the stone gave me no clue as to its formation. It is very hard internally, looking somewhat

like slate, the outer surface crumbling when exposed to the air.

The importance attached to this case is the presence of the polyps and the absence of any apparent nucleus to the stone. It is my opinion that the existence of the tumors prevented the proper drainage of secretions, and by this stoppage separation of the constituent elements of the fluids took place, leaving the solid portions as the nidus of formation. A blood-clot might have been the cause, but of any hemorrhage I could get no history.

I have removed quite a number of rhinoliths and all but this one showed positive evidence of a nucleus. One was from a little girl five years old, who had had almost complete occlusion of the right nostril for two years. From the existence of a unilateral offensive discharge of very bloody muco-pus I immediately diagnosed a foreign body. The mother would not allow an anæsthetic, so, by local applications of an astringent to allay the existing anterior inflammation, I succeeded in getting the nostril sufficiently open to grasp the body with a curette, and forcibly removed a piece of chewing-gum covered with a crust of lime of considerable thickness.

CONGENITAL ECTOPIA LENTIS.*

BY DR. FLAVEL B. TIFFANY.

Gentlemen,—Among the many patients awaiting to-day we have a family of nine children from Leavenworth, Kansas, Vogel by name, seven of whom have "ectopia lentis." (*Ex*, out of; *topos*, place; *lentis*, lens; lens out of place.) This is a rare affection and only once in a lifetime may you expect to meet with such a remarkable case. Some months ago the oldest, Josephine, aged 19, visited me at my office;

*Extract from Clinic Lecture November 24, 1894, University Medical College, 913 East 10th Street.

learning then that other members of the family had the same anomaly as she, I expressed a wish that I might see them. In response to this wish I received a letter from one Mrs. Freckman, of Leavenworth, Kansas. And that you may better understand the conditions and circumstances under which the family come to us, I will read you a part of this letter, with my reply. The letters are as follows:

"LEAVENWORTH, KANSAS, Nov. 20, 1894.

"*Dr. Flavel B. Tiffany:*

"DEAR DOCTOR,—Doubtless my name will have left your memory by this time, as you are such a busy man and see so many people and hear so many names; but you have my name on your books. You treated my eyes last September. * * * Now, I am not writing this letter in my behalf; if you remember, you treated a young girl last year (who was in my employ) who had such strange eyes that you told my friend Mrs. Menneson (the lady who took the girl to you for treatment) to bring the whole family down and you would examine their eyes for nothing. Now, this girl has been in another lady's employ since then, and the lady thought something could be done for her, in spite of our telling her that you said nothing could be done, and the lady took her to Dr. B. at the Fort; he said her eyes were wonderful and that he had never seen eyes like them before, and that nothing could be done; but he told the girl (Josephine Vogel) that if she were in a large place where they study eyes, she could make her living by allowing doctors and students to study her eyes. Now she can make very little at housework, as her sight is so poor, and she asked me to write to you and ask you if it were possible to get such a place, and where she would be able to nurse as well. She is intelligent and faithful, and a Christian as well. If it would not trouble you too much, we would like to have your advice on the subject. I hope it will not be too much to ask of you, and that you will give the matter a moment's thought. Her father is dead and her mother has eight other children to look after, five of whom have bad or defective eyes.

"Hoping to hear from you at your earliest convenience, I am, Sincerely yours, MRS. GEO. FRECKMAN,

"628 Ottawa Street."

"DEAR MRS. FRECKMAN,—Your letter of November 22 came this morning. Replying to the same, would say, that the case is a most interesting one, and I would like to see the other members of the family who are similarly affected. As to the girl's earning much by exhibiting her eyes to the medical students, that would be rather doubtful unless, as Doctor B. said, she were to go to Vienna or London, where there are many medical colleges and a large number of students.

"If she and the other members of the family would come some Saturday, I would take them before my class and ask the students to give something. I think that the amount of the railroad fare could be secured at least, and it might be possible to get a larger sum. Respectfully,

"DR. TIFFANY."

Now, gentlemen, as a result of this correspondence, we have this family with us at this hour, and you will have an opportunity of examining these cases yourselves. During my sojourn of nearly three years in the principal eye clinics of Europe, I saw but few cases of congenital ectopia lentis, and out of about ten thousand cases seen in my private practice and here at the clinic, these, with two others, constitute the sum total. Dr. Noyes in his work ("Diseases of the Eye") of over 700 pages only devotes a part of one page to this subject of congenital ectopia lentis. We frequently have dislocation or luxation of the crystalline lens from diseases, such as synchisis and high degree of myopia, by blows and injuries, but rarely indeed is it that we find the lens displaced from birth, and especially that we should find it in so many of the same family.

[Each child was presented to the different members of the class and the special features of each case were pointed out.

The following is a paper, as a report of the above cases, read by Dr. Tiffany before the Ophthalmological Department of the American Medical Association at Baltimore, May, 1895.]

ECTOPIA LENTIS.

By Flavel B. Tiffany, of Kansas City, Mo.

Gentlemen of the American Medical Association:

In speaking on the subject of Ectopia Lentis before this body of oculists, it is not my purpose to review the literature upon the subject nor to discuss in particular the symptoms or treatment. Each and every one of you doubtless has met with the various forms of ectopia lentis, spontaneous, traumatic, and congenital. In my practice within the last twenty years I have seen almost every form of luxation of the crystalline lens. I have seen the lens as it were a drop of oil in the anterior chamber ; I have seen it extruded through the sclera, lying beneath the conjunctiva; I have also seen it entirely expelled from the eye through the cornea. Only a few days ago, when attempting to evert the lid of a baby with ophthalmia neonatorum, the lens popped out on the cheek through the ulcerated staphylomatous cornea. I have found the lens partially dislocated from its bed, swinging backwards and forwards like a shutter on its hinges. Quite frequently have I found it luxated into the vitreous and floating there. I remember one case in particular where the lens had been broken and thrust into the anterior chamber by an Osage orange thorn; and the attending surgeon was about to remove the eye, mistaking the comminuted lens in the chamber for panophthalmitis.

I call to mind several cases of luxation of the lens into the anterior chamber which, for want of proper diagnosis and timely treatment, had provoked suppurative iritis and glaucoma. Several cases I have had of so-called spontaneous luxation into the vitreous, but invariably they were in myopic eyes or cases of synchisis; but all these you have also had, and it is not of them I wish to speak. I want to call your attention, gentlemen, especially to two cases which are, in my opinion, rare or unique. The first is that of traumatic luxation of both lenses at one and the same time in an

individual whom I saw at Edgar Brown's Clinic at Liverpool, England, September, 1887. The patient was a woman of middle age. Of each eye the lens was seen resting upon the sclera beneath the conjunctiva a few mm. from the inner and upper border of the limbus. There was a rupture of the sclera about eight mm. long between the superior and internal rectus, parallel with the limbus, and some three or four mm. from the sclero-corneal junction. The injury was caused by the clutch of the fist during an altercation between the woman and her son-in-law. I speak of this as a most rare accident, both eyes having been identically and simultaneously injured. But it is to my second case I especially call your attention. This case is that of congenital ectopia lentis in a family of nine children, Vogel family, of Leavenworth, Kansas, seven of whom were thus afflicted, while the other two had not the slightest displacement of the lens. In each of the seven the lens of each eye was displaced in some direction from one-third to one-half or more of its width. With the pupils dilated one could readily view the fundus of the eye either through or at one side of the lens. With the indirect method two images of the fundus could be seen at one and the same time. The lenses all seemed slightly opaque, and the edges were all dark, appearing as a black curved line dividing the pupil; this line probably was due to the total reflection, and not to opacity. In each case there was iridochoroiditis and the lens could be seen swaying slightly to and fro. None of the children complained of or admitted having monocular diplopia.

Of the seven afflicted, there were three girls and four boys, ranging from 4 to 19 years of age. I made a careful examination of both eyes of each child, taking the vision with and without glasses, making a drawing of each eye illustrating the direction of the luxation and the amount. I have had a half-tone made of these drawings and the family group, which I hand you. They will show better than words can

tell the appearance of each case examined. In most of the cases you will notice that the displacement is outward, in some slightly upward and outward. In one alone the lenses of both eyes are displaced toward the nasal side.

4. 5. 1. 2. 3. 7. 6.

In No. 1, the oldest, Josephine, vision without glasses was $\frac{20}{200}$, glasses gave but little improvement.

No. 2, Minnie, aged 16. V. R. E. $\frac{20}{200}$; V. L. E. $\frac{20}{200}$. With +3.50 D. vision was increased to $\frac{20}{60}$. For reading she required +12 D. Pupillary distance was 60 mm.

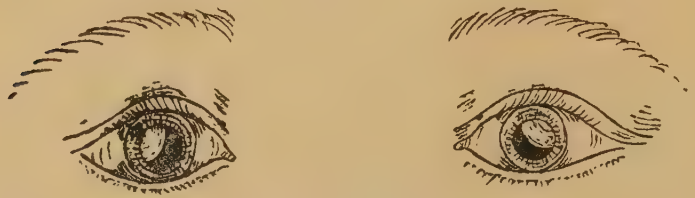
No. 3, Emma, aged 15. V. R. E. $\frac{5}{200}$; V. L. E. $\frac{8}{200}$. +11s D. gave best vision.

No. 4, Willie, aged 12. V. R. E. $\frac{8}{160}$; V. L. E. $\frac{6}{160}$. +11 D. gave best vision.

No. 5, Freddie, aged 10. V. R. E. $\frac{12}{160}$; V. L. E. $\frac{12}{160}$. Gave +13 D., P. D. 60 mm.

No. 6, Theodore, aged 8. V. R. E. $\frac{3}{200}$; V. L. E. $\frac{3}{200}$. +11 D. gave best results.

No. 7, Herman, aged 4. Vision, as near as I could tell, was about $\frac{8}{200}$ of either eye.



HERMAN.

THEODORE.

FREDDIE.

MINNIE.

EMMA.

JOSEPHINE.

WILLIAM.

As the diagram indicates, you will see that in the case of Josephine the lenses are displaced horizontally outward. In the case of Emma the lens of the right eye is vertically upward, while that of the left eye is upward and inward. In Theodore both lenses are displaced upward and outward. In Freddie both lenses are shoved inward toward the nose. This is the only one with the displacement inward of both eyes. In the case of Minnie the lens of the right eye is displaced upward and outward, while that of the left is more nearly horizontally outward. In the case of William the right lens is horizontally outward and the left is upward and outward. In the youngest child, Herman, aged 4, there is but slight displacement, and that is outward and upward in either eye. He seems to have the least amount of vision of any. In none of these cases was the lens dislocated downwards. The other two children, Louisa, aged 18, and Bertha, aged 6, who are not in the group, had $\frac{20}{20}$ of either eye, but under the mydriatic it was revealed that they were hyperopic each to the amount of 3 D. Louisa had the medullary sheath or gray fibres of the optic nerve showing in the left eye.

LOUISA.

The mother of these children is 40 years old, and examination showed nearly a normal eye, or a very slight amount of hyperopia. The father is dead, but the wife testified to having noticed that her husband had something shaking in his eyes, and that he was very near-sighted. He was a tailor and worked constantly at the bench up to his death without glasses. The shaking in the eye that she had noticed was probably a tremulous iris, and from this fact and that he was myopic we may naturally conclude that he was afflicted with ectopia lentis. The father was Swiss and the mother was German, and they were of no blood relation.

Now the question that interests me especially in this group is the etiology, and also why seven out of nine should inherit the anomaly and two should go free, and why all but one should have the displacement outward and none downward. You may say that it is due to an arrest of development; then we naturally inquire of what part of the eye; not of the lens, for certainly in these cases the lenses were of the natural size and shape. If you say that coloboma of the iris or of the retina is due to an arrest of development, or that cleft palate or bifurcated uvula are due to an incomplete union, I can more easily understand that, they being at the median line of the organism. It seems to me that these cases are of special interest from an etiological standpoint, and again from the fact that so large a number of the same family are afflicted. Were we to explain the etiology, what may we say of the distinction? why were most of these children doomed, while two escaped?

In the primary infinitesimal amount of protoplasm from which the body is evolved there are inherent all the potential elements that may go to form the perfect being in all its minutiæ; but if these potential elements are vitiated by abuse, by profligacy, by dissipation, by debauchery, or by excesses and intemperance in any direction, the impress in some way is most sure to be visited on the prenatal child. These freaks and anomalies are then the direct consequences of the violation in some way of the great laws of Nature; and whereas it is not in our power to reintegrate the present, we should ever be on the alert by judicious and timely advice to exert our influence in protecting future generations against vitiated inheritancy, that they may not be dwarfed or crippled in their physical or mental development.

TREATMENT OF ACUTE OTITIS MEDIA.

BY GEO. E. BELLOWS, A.M., M.D.

Oculist and Aurist to St. Margaret's Hospital and to the U. P. Ry. Co.; Lecturer on Histology in the Kansas City Medical College, Kansas City, Mo.

Acute inflammation of the middle ear is regarded by many as one of the minor and least important of the ills which flesh is heir to. Its occurrence is frequent, however; and remembering the serious consequences which not rarely follow, and knowing the almost unvarying success of prompt and proper treatment, we cannot regard it with indifference nor treat it with neglect.

Perhaps the greatest bugbear in otology is chronic purulent otitis media with its attendant and following train of evils. This is almost an absolutely preventable condition where the acute form is given proper medical attention, and without it a great part of otology as we have it to-day would never be written. I wish to consider the *treatment* of acute otitis media, catarrhal and purulent.

Pain is the most prominent and distressing symptom, and will demand the first attention. Nothing is so efficacious in relieving pain, in the great majority of cases, as local blood-letting. Indeed, I believe that no other one procedure will affect so favorably the whole course of the disease as the abstraction early of from one-half to one ounce of blood from the vessels in front of the tragus. The relief from pain is, as a rule, prompt, and the swelling and effusion in the tympanum checked and diminished. I prefer Heurteloup's artificial leech, or Gorham Bacon's modification of it, to the ordinary leeches. It is always at hand, more easy to control, and pleasanter to the patient. It is essential to place the leech immediately in front of the tragus, as here the vessels communicate most freely with the plexus in the tympanic cavity and the effect on the tympanum is most marked.

Next to local blood-letting for the relief of pain, I would place hot water. This should be used in considerable quan-

tity and as hot as can be comfortably borne, thrown in a gentle stream from a fountain syringe directly into the ear. Afterwards the meatus should be thoroughly dried, lightly plugged with cotton, and dry heat applied.

It is not necessary to mention all the drugs and domestic remedies that are used for "earache." Their name is legion. Some are good, more are useless, and many are harmful. None are as reliable as the procedures mentioned.

If, in spite of treatment, the pain and effusion persist, as they sometimes will, paracentesis offers the quickest way to relief, the lower posterior quadrant of the membrana tympani being chosen for the incision. The gentle use of Politzer's air-bag may be necessary to remove the secretion from the tympanum. The only objection to paracentesis is that by opening a way for infection into the tympanum it might convert a simple catarrhal affection into a purulent one. The danger of this, however, is slight and the relief is certain.

If pus has formed and discharges through a natural or artificial perforation in the membrana tympani, the ear must be kept as free as possible from the discharge. It should be gently syringed at least twice a day with warm water, which may contain boric acid. Of the many satisfactory remedies, I have had the best success with a powder composed of boric acid ℥j and resorcin ʒj, blown in lightly with a powder-blower after cleansing and drying the ear. This powder is readily soluble and does not cake or plug the meatus. When the perforation in the drum membrane is so small that powder does not reach the tympanum satisfactorily, I prefer to use instillations of peroxide of hydrogen rather than astringents. I have several times aborted threatened mastoid trouble by the use of cold water through the Heiter coil. When this is not available, I apply a blister over the mastoid process. The treatment of mastoid abscess does not belong here.

In all cases of acute otitis media the patient should be

confined to the house. Mild laxatives, light diet, and, if necessary, antipyretics, aid in securing prompt recovery.

Associated pharyngitis should, of course, be treated; and, as a rule, inflation by Politzer's method or the Eustachian catheter will be necessary for some time after the acute symptoms subside, in order to prevent adhesions in the tympanum, tinnitus, and impairment of hearing.

If the serious character of the trouble were generally appreciated and medical aid summoned in time to have treatment begun early, there would be few failures under the line of treatment laid down.

EYE AND EAR CLINIC IN THE UNIVERSITY MEDICAL COLLEGE.

BY C. D. USSHER, SENIOR STUDENT.

Dr. Tiffany's clinic, held at the college, 913 East 10th Street, Kansas City, Mo., is one of the oldest eye and ear clinics of the mid-continent. Dr. Tiffany established the clinic some sixteen years ago—that is, soon after his arrival in Kansas City, in the fall of 1878. For several years the clinic was held at his private office, where the indigent were treated free of charge in the presence of students of the college. In the fall of 1888, Dr. Tiffany transferred this clinic to the University Medical College building, 913 East 10th Street. The clinic, from its inception, was visited by the poor (suffering from diseases of the eye and ear), not only from Kansas City, but also from the surrounding country. It has gradually grown in size and reputation, until to-day it is one of the most important clinics of the kind in the West. In this clinic most of the diseases and anomalies of the eye and ear are to be seen. During the last year (1894-1895) five hundred new patients were admitted. These with the old patients amounted to about eight hundred, and the number of cases of diseases represented were something

more than two thousand.* The average number of patients treated at each clinic was about forty, and, as there are three clinics a week, the total number of treatments for the year exceeded six thousand.

Among some of the diseases treated within the last year are the following:

EYE.

Retinitis	4
Neuritis	1
Neuro-retinitis	3
Choroiditis	3
Hyalitis	11
Iritis	10
Keratitis	45
Kerato-iritis	10
Hernia of Iris	2
Irido-keratitis	5
Ulceration of Cornea	5
Pannus	13
Leucoma	23
Hyperæmia of Conjunctiva	4
Conjunctivitis	41
Anterior Synechia 12 / Posterior Synechia 4	16
Anterior Staphyloma	10
Posterior Staphyloma	3
Atrophy of Globe	6
Hypermetropia	69
Myopia	9
Astigmatism	5
Ecchemoses of Conjunctiva	2
Presbyopia	12
Pterygium	15
Asthenopia	6
Traumatism of Cornea, Iris, and Capsule of Lens	5
Traumatism (External)	3
Hypopion	1
Abscess of Cornea	1

*The records of the clinic were incompletely kept, and many of the patients had numerous complications, of which only the most important have been recorded here; hence the apparent discrepancy.—C. D. U.

Cyclo-irido-choroiditis	1
Detached Retina	1
Nebulæ of Cornea	3
Foreign Bodies in Eye	7
Glioma	1
Chancre of Eyeball	2
Luxation of Lens, Congenital	14
Luxation of Lens, Myopic	2
Iridodonesis	1
Epithelioma	1
Chorea	2
Glaucoma	3
Paralysis of Optic Nerve	1
Gummata of Iris	1
Rupture of Retina and Blood-vessels	1
Gonorrhœal Ophthalmia	4
Catarrhal Ophthalmia	13
Ptosis	8
Pinguecula	6
Pinguecula Pigmentosa	1
Sympathetic Ophthalmia	5
Trachoma	25
Tinea Tarsi	25
Chalazium	12
Distichiasis	5
Trichiasis	1
Blepharitis	10
Hordeolum	6
Entropion	12
Ectropion	2
Retraction of Inferior Lid due to Necrosis of Malar Bone	1

Cataract	Senile	11	29
	Incipient	6	
	Nuclear	1	
	Lamellar	3	
	Cortical	1	
	Capsular	3	
	Secondary	1	
	Infantile	1	
	Polar	1	
	Traumatic	1	

Hypertrophy of Eyelid	3
Eczema	2
Proptosis	3
Symblepharon	1
Lippitudo	3
Paralysis of 7th Nerve	1
Convergent Strabismus	6
Convergent Alternating Strabismus	1
Divergent Strabismus	1
Dacryo-cystitis	2
Intramarginal Furuncle	1
Epiphora	2
Lachrymal Fistula	1
Nystagmus	2
Ophthalmia Neonatorum	3
Abscess of Lachrymal Sac	1
Obstruction of Nasal Duct	2
Coloboma of Iris	2

EAR.

Hypertrophy of Drum	2
Inspissated Cerumen	4
Non-suppurative Catarrh of Middle Ear	20
Otitis Media, Purulent	18
Otitis External, Purulent	3
Otitis Media et Externa	1
Perforation of Ear Drum	6
Otitis Media	4
Absence of Drum	1
Foreign Body in External Meatus	3
Occlusion of Eustachian Tube	10
Tinnitus Aurium	8
Furuncle in External Meatus	2
Paralysis of Auditory Nerve	2

The operations performed were one hundred and thirty. Among these were the following:

	Cases for Operation.	Operations.
Iridectomy	23	11
Discission	3	3
Extraction of Cataract	21	12

	Cases for Operation.	Operations.
Iridotomy		
Paracentesis (Eye)	3	2
Enucleation of the Eye	8	6
Canthotomy (see Ectropion)		
Operation for Entropion	8	6
Operation for Excision of Cornea	1	0
Operation for Ectropion	2	1
Operation for Pterygium	10	2
Operation for Chalazium	11	5
Operation for Lachrymal Fistula	1	1
Operation for Stenosis of Nasal Duct	2	1
Operation for Ptosis	5	1
Operation for Trachoma	29	5
Operation for Retraction of Inferior Lid	1	1
Operation for Grafting Rabbit's Eyelid	1	1
Operation for Removal of Malignant Growths,	3	3
Operation for Tenotomy of Muscles	10	6
Operation for Advancement of Recti	10	3
Operation for Removal of Inspissated Cerumen	5	5
Operation for Removal of Foreign Bodies in External Meatus	3	3
Operation for Removal of Foreign Bodies in Eye	5	3
Operation for Excision of Uvula	5	1
Operation for Excision of Tonsils	5	4
Operation for Removal of Adenoids	3	3
Operation for Removal of Turbinates	11	2
Operation for Dacryo-cystitis	2	2
Operation for Occlusion of Punctum	2	1
Operations on Private Patients, to which Class was admitted		36
Total		130

At this clinic special instruction is given in ferreting out the anomalies of refraction and of the muscles of the eye. Opportunities are also offered for the study of ophthalmoscopy, retinoscopy, and otoscopy. To it post-graduates, as well as under-graduates, are admitted at all times a year.

The staff of assistants is selected from the junior and senior classes. The student receiving highest grade in the examination may be appointed chief of clinic, and after a year's service in the clinic subsequent to his graduation, a special diploma is granted him.

EYE, EAR, NOSE AND THROAT CLINIC.

EDITED BY

DRS. FLAVEL B. TIFFANY AND JAMES E. LOGAN.

A Neurological Department by

JOHN PUNTON, M.D.

Issued quarterly. . . . . Price, $1.00 per annum.

Office of THE CLINIC, 1233 Grand Avenue.

All communications, books for review, exchanges, etc., should be addressed to the Secretary, DR. H. D. JEROWITZ, 1233 Grand Avenue, K. C., Mo.

EDITORIAL.

In issuing the "EYE, EAR, NOSE AND THROAT CLINIC" it is the aim of the editors to present to the general practitioner some of the many interesting cases that come daily to our public clinics and private offices; such cases as every practitioner may occasionally meet with in his general practice, but for want of special training and experience he is frequently unable to recognize or diagnose, and hence not able always to give timely and judicious advice.

We shall also hope to interest the specialist as well, by reporting and discussing some of the rarer and more occult subjects, which to him alone are of special interest.

The "CLINIC" does not wish to occupy or invade territory already taken, but rather in her special way work in harmony with other journals for the uplifting and general good of the medical profession. It shall be the aim of the journal to bring before the reader subjects especially of practical importance and in as condensed, concise and lucid a manner as possible. Brief and comprehensive reports of cases in every-day practice on the subjects pertaining to the eye, ear, nose, and throat are solicited. Condensed reports of the various medical societies will also be acceptable. It is

thought that a more intimate acquaintance with our ancient medical brethren, even into *mythic story*, and all along the line, from Æsculapius and Hippocrates down to our present time, will be profitable; and hence we propose as a frontispiece to each issue a "half-tone" and biographical sketch of some brother of historic note.

There will also appear in each issue an article similar to the "Rembrandt" of this our first issue.

Dr. John Punton will also furnish an article pertaining to the interesting subject of Neurology and Phychological Medicine.

In closing these our introductory remarks we cordially invite our colleagues in these special branches throughout the world to contribute of their actual experience or discoveries and views, and thus add to the value and interest of the EYE, EAR, NOSE AND THROAT CLINIC.

The CLINIC is to be issued quarterly, July, October, January, and April. All articles should be in the hands of the secretary at least six weeks previous to the issue of the number in which the contribution is to appear.

Space in the journal will not admit of lengthy articles, nor are such articles appreciated by the busy practitioners of this age. Nowadays we want the kernel without the husk; we want it pure and simple, wholesome, sweet, and palatable. Tell us the story in simple, comprehensive language, and "be not too long in coming to the point."

The price of the EYE, EAR, NOSE AND THROAT CLINIC is but one dollar ($1.00) a year. The "half-tone" alone with biographical sketch of each number is worth at least the price of the journal.

We cordially invite one and all to send us an order and *a dollar* for the journal. One dollar sent by check or otherwise will insure the registration of your name and the CLINIC for one year.

AMERICAN MEDICAL ASSOCIATION.

The forty-sixth annual meeting of above association convened at Baltimore, May 7, 8, 9 and 10, with President Donald Maclean in the chair.

The meeting was interesting and profitable. All the different departments were well represented. Our time was mostly spent in the section of ophthalmology, which was presided over by Edward Jackson, of Denver, Colorado.

There were announced on the program of this department fifty papers to be read and with but few exceptions the essayists were present.

In the discussion of immature cataract it was the general opinion that it was hazardous to hasten its development. [It has been the writer's experience also that this is a dangerous procedure, and at the very best, with the closest attention and persistently keeping the pupil dilated, there is danger of the swollen lens crowding against the iris and ciliary body, provoking most grave results.] Dr. Thompson, of Indiana, and others related some cases of spontaneous absorption of cataract; however, all of these reports were qualified, leading us to believe that the opacities were of mistaken diagnosis. No one mentioned the new drug, *cineraria maritima*, which is claimed to possess the power of absorbing cataract.

Dr. Knapp read an instructive and interesting paper on the grafting of strips of skin into the intramarginal space of the lids for ectropion.

Dr. Knapp said he did not claim anything new in his paper. He makes his skin flaps without a pedicle—that is, without attached ends. He does not use mucous membrane, but integument instead. [It has been the custom of the writer to use the integument with the cartilage of the upper lid for intramarginal flaps as a cure for entropion and trichiasis. The cartilage wedges the ciliary flap up and away from the eye and permanently secures the lashes curved

away from the globe. With the cartilage the results are more permanent than with the skin flap alone.]

Hotz, in his paper on "Skin-Grafting in Ectropion and Entropion," gave nothing new. He emphasized the desirability of the cosmetic effect.

Dr. Savage advocated Dr. Green's operation, or a modified form of this operation, which consists merely in an incision from one canthus to the other through the conjunctiva and tarsal cartilage up to the integument two or three mm. from and parallel to the margin of the lid. [In this modified form there is no integument removed. To keep the margin of the lid everted, collodion may be brushed over the integumental surface.]

Dr. Savage, in explaining the operation, said that he occasionally made two or three vertical slits through the margin, one at either canthus and one midway between.

The so-called "Hotz operation" for entropion was regarded as a failure, as relapses are almost sure to follow.

In the discussion of the affections of the muscles of the eye, Dr. Stevens, of New York, said that he rarely, if ever, found it necessary to make free tenotomy, even in strabismus. Dr. Knapp and others related cases of suppuration of the muscles after tenotomy, caused probably by want of aseptic or antiseptic precautions. Dr. Knapp thought that sub-conjunctival operations are more liable to be followed by suppuration. [The writer has never had the experience of suppuration after tenotomy of the extrinsic muscles of the eye, although he invariably makes his operations sub-conjunctivally.]

Dr. Gifford, in his remarks on Dr. De Schweinitz's paper, said that the bacillus of Deutschmann may be found in the ciliary processes, the place most favorable for the development of the germ. He also said that the bacillus has spores, but the micrococcus has no spores.

Dr. Knapp candidly stated, "As to the cause of sympathetic ophthalmia, I don't know."

Dr. Oliver Belt, in his paper on "Prognostic Significance of Albuminuric Retinitis," stated that 88 to 94 per cent of the patients suffering from albuminuric retinitis die before two years, according to the statistics of several oculists.

The report of the committee on the examination and care of the eyes during school life, by Dr. Randall, chairman, was complete and interesting.

In the discussion which followed Dr. Risley said he spends twenty-eight minutes on each student with his assistants making sketches of the fundus of each eye and any abnormality of the eye ground. The examinations were made in a dark room of the school-house. He stated that the teachers might assist in making these examinations and gathering statistics, if they had the time, but they are, as a rule, pressed with work and cannot give it the attention it demands.

Dr. Würdemann gave an interesting practical paper on the infiltration method of anæsthesia, showing that salt water (2 per cent solution), injected hypodermically, will produce profound anæsthesia. He demonstrated this fact by removing several cystic tumors.

On the paper "Ectopia Lentis," by Dr. Tiffany, Drs. Thompson, of Indiana, and Dr. Hotz, of Chicago, spoke of cases in their practice of congenital ectopia lentis with monocular diplopia. In Dr. Tiffany's cases reported there was no monocular diplopia spoken of by the patients, nor could it be elicited. Dr. Randall, in his remarks, said that his observation had been that in congenital luxation of the lens the displacement was inward. Replying, Dr. Tiffany said that Dr. Randall's observations were contrary to his own and to all literature on the subject. Dr. Gifford reported a case of a family of congenital ectopia lentis, but did not give

the number of children so affected. Dr. Hotz suggested the extraction of the lens as treatment for said anomaly.

In some subsequent number of the CLINIC we shall be able to publish some of these valuable papers read before this important medical society, for certainly the American Medical Association, excepting perhaps the International Medical Congress, is the most scientific representative body of the medical profession of America, bringing together as it does the peers of the profession from all parts of the country. F. B. T.

ZEPHYRS.

Dr. B. E. Fryer is in the East.

The City Hospital is to be enlarged this autumn.

Dr. C. W. Adams is spending the summer in the Occident.

The Academy of Medicine has adjourned during July and August.

All the medical colleges will open about the middle of September.

The German Hospital is becoming enlarged by an imposing structure.

Dr. C. W. Burke has left Kansas City and is now located at Los Angeles.

The Jackson County Medical Society meets weekly in spite of the hot weather.

Woman has plenty of room to laugh in her sleeve while the present style prevails.

A training school for nurses has been recently inaugurated in the All Saints' Hospital—Dr. James E. Logan at the helm.

The health of our city still maintains its low rate of mortality and Kansas City is fast becoming a health resort.

The Abbey decorations of the new library building of Boston are now completed. They are probably the finest in the country.

Von Helmholtz's library has been purchased by order of the Emperor of Germany for the Imperial Institute of Physics in Berlin.

What are the attributes of nobility? Earnestness of purpose, faithfulness to duty, impeachable character, and love of humanity.

If the medical profession is the noblest profession, let us keep it so by opening our doors only to the noblest of our youths as students.

The new library building of Kansas City, at Ninth and Locust Streets, is under way, and ere long it will make one more attraction to our city.

The Kansas City Medical College and the Western Dental College are being enlarged to keep pace with the strides our city is taking in the medical path.

The medical department of the University of Kansas, located at the Southwest Boulevard, will not be opened until appropriate appropriation is appropriated.

We all appreciate the vigilance of the *Star* (Mr. Nelson) in promoting the welfare of the city, securing dollar gas, parks, boulevards, owning our water works, etc.

At the meeting of the American Medical Association which recently convened at Baltimore, the American Medical College Association adopted the four-years course which is approved by all the best medical colleges of the United States and they are all fast coming into line.

All Saints' Hospital has been re-rented by the University Medical College and has been reconstructed with a competent corps of officers and nurses—Dr. E. R. Lewis in charge.

The medical student of all others should be well grounded in Latin and Greek; in other words, he should have at least a high school education before taking up the study of medicine.

The American Medical Association, the representative body of the medical world of the western hemisphere, is to meet at Atlanta, "the sunny South," the next year. R. Beverly Cole, of California, as president.

The proverb, "You'll be damned if you do and you'll be damned if you don't," was well illustrated in the efforts of our worthy mayor, Webster Davis, when he vetoed the franchise to the consolidated cable line company.

Kansas City is fast becoming the medical center of the West, and as a proof of this advance, the University Medical College is being enlarged to accommodate the great number of students who come to worship Æsculapius.

The great increase in number at the University of Kansas last year was due to the dry weather and poor corn crop. —*Student.*

The prospective great increase of students this year over last is because of copious rains and abundance of corn crop.—*Chancellor Snow.*

The first edition of Dr. Flavel B. Tiffany's book on "Anomalies of Refraction and Muscles of the Eye" is nearly exhausted, and a second edition has been ordered to meet the increasing demand. Price, $3.00. This book is meeting with special favor on the part of the general practitioner and student of ophthalmology. It can be obtained directly from the author, Dr. Flavel B. Tiffany, 1233 Grand Ave., Kansas City, Mo.

The doctor should not only be interested in medicine, but he should have a voice in the municipal affairs of the government and should assist in electing the very best men possible to fill the responsible positions of the city government as well as those of the nation. Give us men who will not jump into the band-wagon because others are going that way, but men with integrity of character, nobility of purpose, and men who will work in the interest of the city, and stand by the people first, last, and all the time.

Average Duration of Life Among Physicians.—A curious statistical record has been compiled by Dr. Salzmann, of Essling, Wurtemberg, on the average duration of life among physicians. He found, in going over the ancient records of the kingdom, that in the sixteenth century the average duration of life among that class was but 36.5 years; in the seventeenth century, 45.8; in the eighteenth, 49.8; and at the present time they reach the favorable average age of 56.7.—*Medical Record.*

UNIVERSITY MEDICAL COLLEGE,

913 EAST TENTH ST.

The fifteenth annual session will open Tuesday, Sept. 17, 1895, and continue six months.

For catalogue and any further information, send to Dr. C. W. ADAMS, Dean, Or Dr. L. A. BERGER, Secy.,

1201 Grand Ave., KANSAS CITY, MO.

COLLEGE OF PHARMACY,

913 East Tenth Street.

Opens September 30, 1895. For catalogue and further information, address

C. C. HAMILTON, M.D., Prest.,
913 E. Tenth St., Kansas City, Mo.
JULIUS G. KIEFER, M D., Ph.G., Secy.

The Kansas City Dental College.

Organized in 1881.

Cor. TROOST AVE. and TENTH ST.

Term opens Sept., 1895. For full information, address the Secretary,
J. D. PATTERRSON, D.D.S.,
Keith & Perry Bldg., KANSAS CITY, MO.

BRYANT & DOUGLAS,

MEDICAL BOOK DEALERS.

1012 Walnut St., KANSAS CITY, MO.

The
Kansas City Veterinary College,

310 East Twelfth Street, KANSAS CITY, MO.

Will open Oct. 1, 1895. For catalogues address the Secretary,
JUNIUS H. WATTLES, D.V.S.

The Anomalies of Refraction and of the Muscles of the Eye. By FLAVEL B. TIFFANY, M. D. Price, $3.00.

Published and for sale by

HUDSON-KIMBERLY PUB. CO.,
1014, 1016 Wyandotte St.,
KANSAS CITY, MO.

UNIVERSITY MEDICAL COLLEGE TRAINING SCHOOL.

Held at
ALL SAINT'S HOSPITAL.

Address, DR. J. E. LOGAN,
1210 Wyandotte St., Kansas City, Mo.

THE WOMEN'S MEDICAL COLLEGE, OF KANSAS CITY.

13th and Grand Ave.

For further information, address,
DR. JOHN PUNTON, Sec'y,
308 New Ridge Bldg., KANSAS CITY, MO.

Western Dental College Of Kansas City, Missouri.

Located in the very heart of the business center, corner 10th Street and Baltimore Avenue.

Finest equipped Dental College in the West. A full corps of professors and teachers. All the latest mechanical and electrical devices used in Dentistry taught and practically applied. For terms of tuition and other particulars, apply to

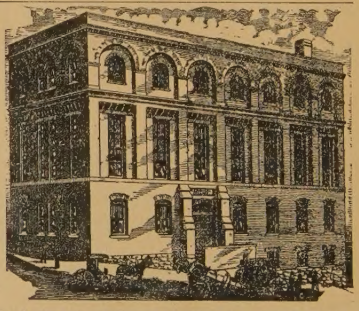
D. J. McMILLEN, Dean,
Cor. 11th and Walnut Sts.,
KANSAS CITY, -:- MISSOURI.

A. M. WILSON,

Dealer in

MEDICAL BOOKS.

New Ridge Building, KANSAS CITY, MO.



KANSAS CITY MEDICAL COLLEGE, New college building, N. W. cor. 7th and Washington Sts. The 26th annual session opens Sept. 18, 1895, and continues six months. For catalogue, etc., send to **J. D. Griffith, M.D., Dean, Rialto Bldg. Or Theo. S. Case, M.D., Secy., 717 Wall St.**

Directory of Physicians Doing Special Practice in Kansas City, Mo.

Dr. John Punton

Begs to inform the profession that he is prepared to receive for treatment at his residence a limited number of patients suffering from the various forms of Mental and Nervous Diseases.

References:
The Medical Profession of Kansas City and Vicinity.

Office New Ridge Bldg., 915 Main Street, . . .

Kansas City, Mo.

DR. CLAUDE C. HAMILTON,

Analytical Chemist and Assayer,

913 East Tenth Street.
Telephone 2254.

Prepared to perform every class of Analysis and Assaying, as well as Experimental Chemical Work, with accuracy and care.

DR. THEODORE W. SCHAEFER,

PRACTICE CONFINED TO

Genito-Urinary and Skin Diseases.

1116-18 Main Street,
KANSAS CITY, - MISSOURI.

DR. A. H. CORDIER,

PRACTICE LIMITED TO

GYNÆCOLOGY AND ABDOMINAL SURGERY.

Office, 310 Rialto Building.
Telephone 1249.

DR. G. W. DAVIS,

PRACTICE LIMITED TO

Genito-Urinary, Venereal and Skin Diseases.

Journal Building, 10th and Walnut Sts., KANSAS CITY, MO.

Telephone 124.

H. C. CROWELL, M.D.

. . . PRACTICE LIMITED TO . . .

Abdominal Surgery and Diseases of Women.

Office Hours, 2 to 5 P. M.
Telephone 1366. . . . .

Y. M. C. A. Building., Ninth and Locust Streets,
KANSAS CITY, MO.

F. L. RILEY, M.D.

Teacher of PHYSICAL CULTURE.

Patients sent by the medical profession will be given careful attention.

Y. M. C. A. Building.

J. BLOCK, M.D.

Surgeon to the German Hospital,

SPECIAL ATTENTION GIVEN TO

Genito-Urinary Diseases and Diseases of the Skin.

Telephone 986. Journal Bulding.

DR. T. R. McCLINTOCK,

Diseases of the Ear, Nose and Throat a Specialty.

OFFICE:

1233 GRAND AVE.,
KANSAS CITY, MISSOURI.

-:DR. T. J. BEATTIE,:-

Special Attention Given to

Gynæcology and Abdominal Surgery.

204 and 205 Journal Bldg.

DR. HAL FOSTER,

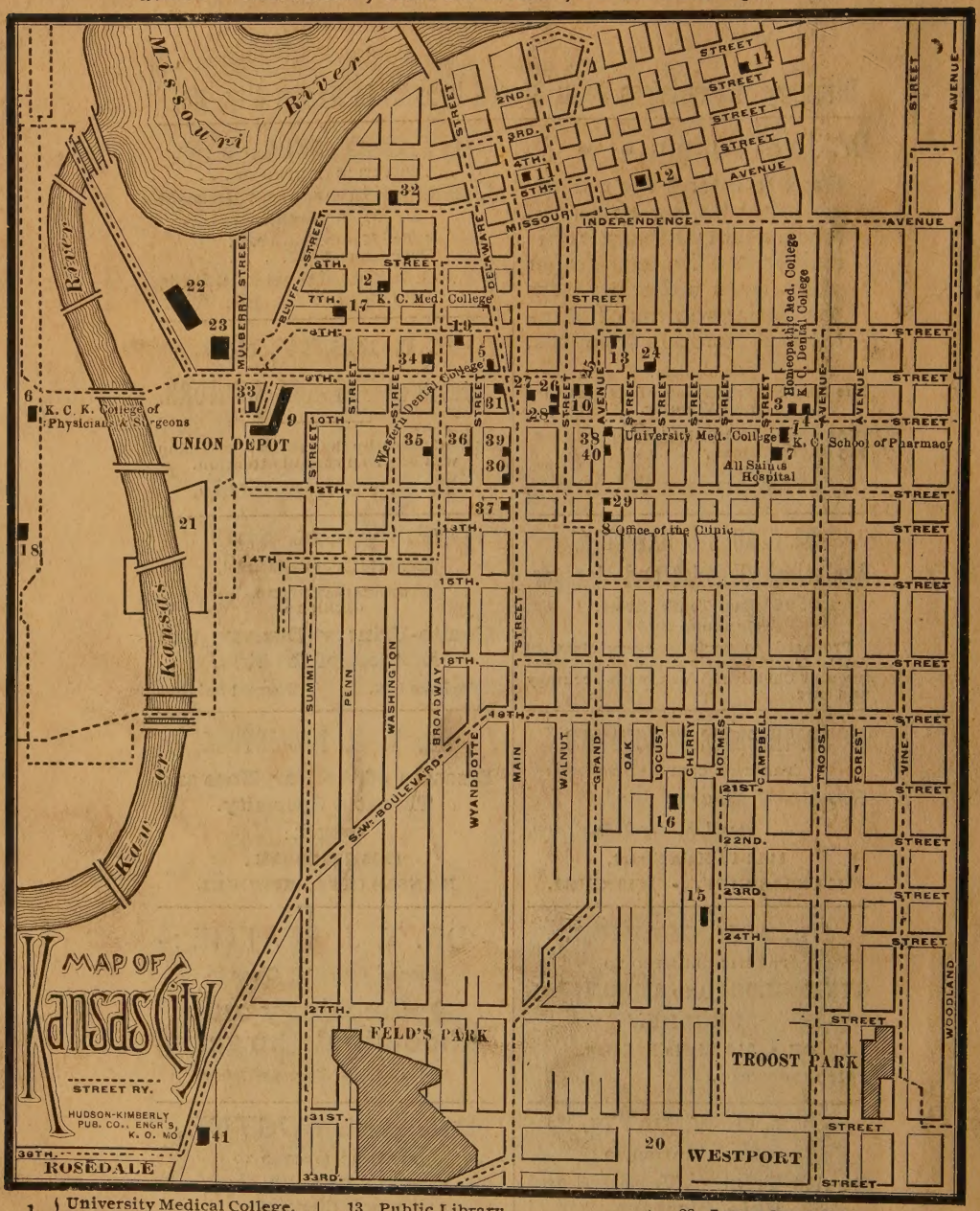
PRACTICE LIMITED TO

Diseases of the Ear, Nose and Throat.

Office, 1116 Main St., Rooms 1, 2 and 3, KANSAS CITY, MO.

Telephone 2286.

All roads lead to Kansas City, the great medical center. Which college are you going to attend? Don't know; there are several; I'll see when I get there.



1 { University Medical College. / K. C. School of Pharmacy.
2 K. C. Medical College.
3 Homeopathic Medical College
4 K. C. Dental College.
5 Western Dental College.
6 K. C. K. College of Physicians and Surgeons.
7 All Saints' Hospital.
8 Office of the Clinic.
9 Union Depot.
10 Post Office.
11 City Hall.
12 Court House.
13 Public Library.
14 Wabash Hospital.
15 German Hospital.
16 City Hospital.
17 St. Joseph's Hospital.
18 St. Margaret's Hospital.
19 Missouri Pacific Hospital.
20 Home for the Aged.
21 Stock Yards.
22 Armour's Packing House.
23 Jacob Dold's Packing House.
24 Y. M. C. A. Bldg.
25 Rialto Bldg
26 Physicians' Supply Co.
27 J. N. Scott.
28 Love's Drug Store.
29 Zahner's Drug Store.
30 Griffith's Drug Store.
31 Federman & Hallar.
32 Evans-Gallagher Co.
33 Woodward, Faxon & Co.
34 Eli Lilly Drug Co.
35 Parke, Davis & Co.
36 Hudson-Kimberly Pub. Co.
37 G. B. Lichtenberg.
38 D. C. Prudden.
39 Julius Baer
40 Julius King Optical Co.
41 Medical Department of the Kansas State University.